BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2011-20-E

In the Matter of	)
	)
Amended Project Development Application of	)
Duke Energy Carolinas, LLC	)
for Approval of Decision to Incur Nuclear	)
Generation Pre-Construction Costs	)
	)

REBUTTAL TESTIMONY OF

RONALD A. JONES

FOR DUKE ENERGY CAROLINAS, LLC

Q. PLEASE STATE YOUR NAME, ADDRESS, AND POSITION.

A. My name is Ronald A. Jones. My business address is 526 South Church Street, Charlotte, North Carolina. I am the Senior Vice President of Nuclear Plant Development for Duke Energy Carolinas, LLC ("Duke Energy Carolinas" or the "Company").

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN SUPPORT OF DUKE ENERGY CAROLINAS' APPLICATION IN THIS DOCKET?

A. Yes, I am adopting the pre-filed direct testimony of Dhiaa M. Jamil in support of the Company's application.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The primary purpose of my rebuttal testimony is to respond to concerns raised by the intervenors in this proceeding regarding the impacts of the recent events in Japan on the Company's development of the Lee Nuclear Station ("the Project") and to more specifically respond to the testimony of Nicholas Phillips, Jr. filed on behalf of the Office of Regulatory Staff in this docket.

Q. WHAT ARE THE SHORT-TERM AND LONG-TERM EFFECTS FOR THE NUCLEAR POWER INDUSTRY IN THE UNITED STATES CAUSED BY THE SITUATION AT THE JAPANESE FUKUSHIMA-DAIICHI NUCLEAR POWER PLANT?

A. The true scope of the impacts of the events occurring in Japan last month following the unprecedented earthquake and tsunami are still being evaluated and realized. In the short term, the nuclear power industry in the U.S. is working through the U.S. government and international organizations to provide assistance to the Fukushima Daiichi plant and Japanese people. In addition, the industry is gathering and evaluating information from the event and performing assessments of U. S. nuclear power plants to verify the

operating plants are well positioned to handle challenges both within and beyond the design basis for such plants. The events at Fukushima Daiichi plant already have prompted U.S. nuclear plant owners to approve an industry-wide assessment to verify and validate each plant site's readiness to manage extreme events. The assessment includes the following actions:

- Verifying each plant's capability to manage major challenges, such as aircraft impacts and losses of large areas of the plant due to natural events, fires, or explosions. Specific actions include testing and inspecting equipment required to mitigate these events, and verifying that qualifications of operators and support staff required to implement them are current.
- Verifying each plant's capability to manage a total loss of off-site power. This will require verification that all required materials are adequate and properly staged and that procedures are in place, and focusing operator training on these extreme events.
- Verifying the capability to mitigate flooding and the impact of floods on systems inside and outside the plant. Specific actions include verifying required materials and equipment are properly located to protect from flood.
- Performing walk-downs and inspections of important equipment needed to respond successfully to extreme events like fires and flood. This work includes analysis to identify any potential that equipment functions could be lost during seismic events appropriate for the site, and development of strategies to mitigate any potential vulnerabilities.

The longer-term impacts from the events at the Fukushima Daiichi plant are still being understood. License applications for new plants, reactor designs and license extensions at existing reactors are comprehensive and undergo a rigorous examination by the U.S. Nuclear Regulatory Commission ("NRC"). Safe operation is the paramount consideration for approval. As is the practice of both the NRC and the industry, we will learn from the events in Japan. We will also evaluate this understanding against our current practices at America's nuclear energy facilities and take all appropriate actions to protect public safety and workers at our facilities.

Furthermore, I would like to emphasize:

- The ability of current and future nuclear plants to withstand natural events, such as earthquakes, tornadoes, floods and hurricanes, has been incorporated into the design of all U.S. nuclear plants;
- Nuclear plant designs also include additional "margin" above design requirements;
- Seismic hazards are based on plant location and geology and the maximum predicted earthquake;
- All U.S. plants are designed to withstand a total loss of alternating current electric power;
- All plants within Duke Energy Carolinas' nuclear fleet have on-site power sources beyond the regulatory minimum to provide additional safety margin. This includes, but is not limited to, diesel and steam-driven generators/pumps, batteries, and independent support facilities that can be used in the event of an emergency;

- Post September 11th measures require U.S. nuclear plants also be capable of coping with significant destruction due to fires, explosions, and aircraft impacts;
- U.S. nuclear power plant operators have guidelines to follow in the unlikely event that a severe accident results in fuel damage; and finally
- U. S. nuclear power plants regularly practice the response to various severe accidents in emergency preparedness drills that are carried out in cooperation with local, state, and federal agencies.

Nuclear energy has and will continue to play a key role in safely and reliably meeting the energy needs of Duke Energy Carolinas' customers. Duke Energy Carolinas will continue to operate its seven nuclear units safely and efficiently, while implementing any enhancements that may be identified from careful evaluation of the events at the Fukushima Daiichi plant. The Company is continuing with its development activities for the proposed Project in order to preserve the valuable resource option for long-term baseload electricity generation from nuclear power for the benefit of its customers.

Q. IN LIGHT OF THE FUKUSHIMA-DAIICHI ACCIDENT AND THE EXPECTED SCRUTINY OF THE NUCLEAR INDUSTRY IN THE U.S., WHY SHOULD THE COMMISSION APPROVE THE COMPANY'S REQUEST AT THIS TIME?

A. The Commission should approve the Company's request in this Application because its decision to continue to incur costs to develop the Project remains reasonable and prudent. Duke Energy Carolinas regularly shares, studies, and learns from the experience of other operational nuclear units, nuclear development projects, and other relevant matters within the nuclear industry. The Company will incorporate lessons learned from this event into

its current operating and future plants, and will continue to do whatever is necessary to ensure the safety of our communities and employees.

The Company needs to understand in detail what occurred at Fukushima-Daiichi nuclear plant, and this will require several steps. The initial information gathering and analysis will primarily be performed by the NRC. Once the full and complete facts around the events in Japan are known and understood, those events should be compared to the proposed plants in the U.S. and the expectations of the range of possible occurrences at the site of the Project. This analytical step will likely be performed jointly by Duke Energy Carolinas and the NRC with input from interested intervening groups. At that point, the Company will be in a position to define any necessary modifications to the Project. It is reasonable to expect that the modifications will be managed in an orderly fashion by the NRC, and since the Project has not received a Combined Construction and Operating License from the NRC, there is ample time to incorporate the necessary modifications into the Project with little disruption.

Q. DISTINCTIONS BETWEEN "PRECONSTRUCTION COSTS" AND "CONSTRUCTION COSTS" HAVE BEEN RAISED IN THE HEARING. IS THE COMMISSION BEING ASKED IN THIS ORDER TO RULE ON SPECIFIC COSTS OR ACTIVITIES RELATED TO THE LEE PROJECT?

A. No. The Commission is not being asked to rule on the prudency or recoverability of any specific items of cost at this time. The matter before the Commission is instead the prudency of the decision to incur preconstruction costs for the Project.

Q. ARE THE ACTIVITIES AND COSTS DUKE ENERGY CAROLINA'S HAS EXECUTED TO THIS POINT ON THE PROJECT AND THE ACTIVITIES

DESCRIBED IN THIS APPLICATION BASED ON YOUR KNOWLEDGE, "PRECONSTRUCTION COSTS"?

A. Yes. All of the work performed to this point and planned through the end of 2013 for the Project falls within the confines of "evaluation, design, engineering, environmental and geotechnical analysis and permitting, contracting, other required permitting including combined operating license permitting, and initial site preparation." I do not offer this opinion as a matter of legal interpretation, but rather based on the basic nature of the work performed. As such, it is my opinion that the preconstruction work performed and planned falls within the stated definition of "preconstruction work" within the Baseload Review Act, set forth in S.C. Code Ann. Section 58-33-220. On the contrary, none of the activities completed to date or contemplated under this Application are associated with "initial clearing, excavation, dredging or construction" of the Project. Additionally, no drawing has been released for construction, no contract has been awarded for construction activities and no material for construction has been purchased by the Company in its development of the Project, nor are these activities planned to occur during the predevelopment phase of the Project.

Q. PLEASE EXPLAIN TO THE COMMISSION YOUR REACTION TO THE RECOMMENDATION OF MR. PHILLIPS ON PAGE 19 OF HIS TESTIMONY THAT "DUKE SHOULD HAVE THE BURDEN OF SHOWING THAT THESE EXPENDITURES ARE IN FACT THE MINIMAL AMOUNT NECESSARY TO MAINTAIN ITS FILING WITH THE NRC."

A. There are two issues presented by this recommendation of Mr. Phillips. The first is a legal issue, and while I am not a lawyer, it is my understanding that the statutory

provision under which the Company filed its application, S.C. Code Section 58-27-225, expressly establishes what burdens the Company bears regarding the prudency of costs. I do not think that the Commission should accept Mr. Phillips' recommendation if it means changing the statutory scheme of Section 58-27-225.

The second issue presented by this recommendation relates to the prudency with which the Company continues to take actions to keep the Project on track to provide a resource option for its customers in the 2021 timeframe. The Company's track record on this Project shows that we have done exactly what is being recommended: our spending has occurred at a much slower rate than originally planned (and approved) because of changes in circumstances that arose after the issuance of the first project development order by this Commission. I believe that type of prudent management of the project is what Mr. Phillips is calling for and we are committed to continuing to provide it.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.